

REMARKS

Claims 1-3 and 5-10 are pending in this application. Claim 4 has been incorporated into claim 1. Support for new claims 7-11 is found in original claim 4 and at page 5 of the specification. It is submitted that the above-noted amendments and new claims are fully supported by the original disclosure of the present application and introduce no new matter.

Removal of Objection to Claim 6

Claim 6 has been objected to under 37 C.F.R. § 1.75(c) as being of improper dependent form. In view of the changes to claim 1, claim 6 now correctly depends from claim 1. Consequently, this objection should be withdrawn.

Issues Under 35 U.S.C. § 102(b)

Claims 1-6 have been rejected under 35 U.S.C. § 102(b) as being anticipated by JP '917 (Japanese Patent Publication No. 2000-292917). This rejection has been overcome based on the following reasons.

Present Invention

The resist composition of the present invention as defined by the present claims includes a resin component (A) with a

polymerization unit of the formula (IIa) or (IIb). These polymerization units do not include any norbornene groups.

Distinctions between Present Invention and JP '917

JP '917 discloses a resist composition which has a polymerization unit of the formula (II). This unit requires the presence of a norbornene structure.

JP '917 fails to disclose or suggest the use of a polymerization unit which does not include a norbornene structure. Further, JP '917 fails to provide any basis or suggestion to one skilled in the art to employ a polymerization unit without a norbornene structure. Consequently, JP '917 fails to disclose or suggest the polymerization units of formulas (IIa) or (IIb) used in the composition of the present invention. Therefore, significant patentable distinctions exist between the present invention and JP '917 such that the above-noted rejection under 35 U.S.C. § 102(b) should be withdrawn. In addition, it is submitted that the failure of JP '917 to provide any basis for a motivation to one skilled in the art to employ the polymerization units of either formula (IIa) or (IIb) removes any possible basis for alleging *prima facie* obviousness under 35 U.S.C. § 103, such that such a rejection should not be made in the future.

It is submitted for the reasons stated above that the present claims define patentable subject matter such that the present application should be placed into condition for allowance.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) respectfully petition(s) for a three (3) month extension of time for filing a reply in connection with the present application, and the required fee of \$930.00 is attached hereto.

Attached hereto is a marked-up version of the changes made to the application by this Amendment.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By


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Attachment: Version with Markings to Show Changes Made

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

The paragraph beginning on page 1, line 9, has been amended as follows:

A lithography process using a resist composition has usually been adopted in the minute processing of a semiconductor. In the lithography, the resolution can be improved with a decrease in wavelength of exposure light in principle as expressed by the equation of Rayleigh's diffraction limit. A g-line with a wavelength of 436 nm, an i-line with a wavelength of 365 nm, and a KrF excimer laser with a wavelength of 248 nm have been adopted as exposure light sources for lithography used in the manufacture of a semiconductor. Thus, the wavelength has become shorter year by year. An ArF excimer laser having a wavelength of 193 nm is considered to be promising as a next-generation exposure light source.

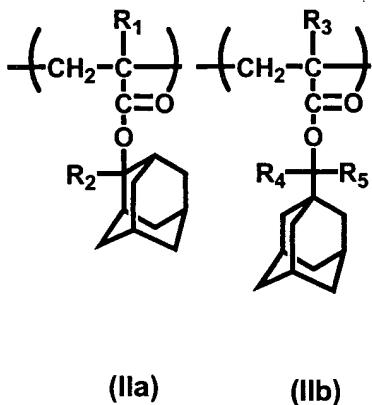
IN THE CLAIMS:

Claim 4 has been canceled.

The claims have been amended as follows:

1. A chemically amplifying type positive resist composition comprising

(A) a resin which has at least one polymerization unit selected from those represented by the following formula (IIa) or (IIb):
has an alkali soluble group protected by 2 alkyl 2 adamantyl group or 1 adamantyl 1 alkylalkyl group;

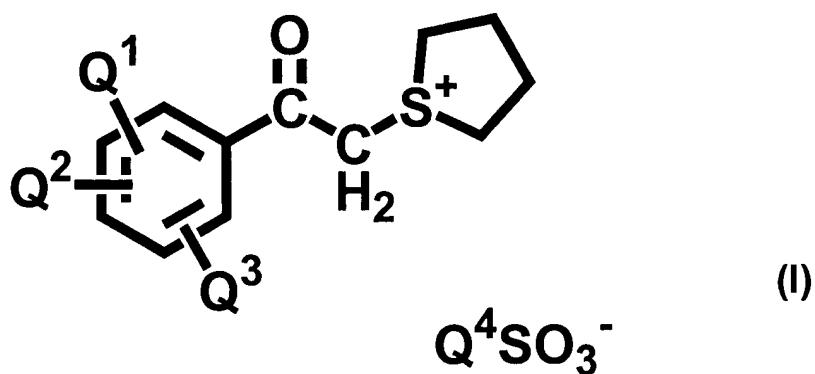


(IIa)

(IIb)

wherein R_1 and R_3 represent hydrogen or methyl, and R_2 , R_4 and R_5 represent alkyl; and which, per se, is insoluble or slightly soluble in alkali but becomes soluble in alkali by the action of an acid; and

(B) a sulfonium salt acid generating agent represented by the following formula (I):



wherein Q¹, Q² and Q³ independently represent hydrogen, hydroxyl, alkyl having 1 to 6 carbon atoms or alkoxy having 1 to 6 carbon atoms; and Q⁴ represents perfluoroalkyl which may have a cyclic structure.

6. The positive resist composition according to claim 1 wherein 20% by mole or more of the polymerization unit of the resin is represented by the formulae (IIa) or (IIb) ~~IIa, IIb,~~
~~IIc or IId.~~

Claims 7-11 have been added.